

## **REMARKS**

### ***Allowable Subject Matter***

Applicants acknowledge with appreciation that claims 8-11 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form  
5 and including all of the limitations of the base claim and any intervening claims.

### ***Claim Rejections - Double Patenting***

Claims 1, 3-7 and 12 were rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1-6 and 10 of United States Patent No.  
10 6,662,802. Claims 1 and 2 were rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claim 1 of United States Patent No. 7,769,431 (we assume the Examiner meant United States Patent No. 6,769,431) in view of United States Patent No. 4,686,354 to Makin. Applicants request clarification of same. Claims 1 and 3 were provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1 and 3 of copending Application Serial No. 10/649,938 in view of  
15 Makin. Claim 1 was provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1 and 3 of copending Application Serial No. 10/622,755 in view of Makin.

20 1. **United States Patent No. 6,662,082**

Applicants are concurrently filing a terminal disclaimer in view of United States Patent No. 6,662,082 in order to overcome the rejection regarding same.

2. United States Patent No. 6,769,431 in View of Makin

With regard to United States Patent No. 6,769,431 (which is the document it appears the Examiner meant to refer to), the Examiner suggests that claim 1 of the ‘431 patent discloses all of the features of claim 1 of the current application with the exception of providing a heating element covered with an inner electrical insulating layer. The Examiner suggests that Makin discloses such a heating element and therefore it would have been obvious to modify the ‘431 patent as taught by Makin in order to arrive at the presently claimed invention.

The ‘431 patent is directed to a novel breathable conduit and an inventive form of longitudinal reinforcement for the same. The present invention teaches a conduit including a heating means located **within** and wherein the heating means is covered with an inner insulating layer and a hydrophilic outer layer.

Given that claim 1 of the ‘431 patent does not disclose a heater of any description, Applicants submit that it could not be obvious for a person skilled in the relevant art to modify the conduit of claim 1 of the ‘431 patent according to Makin. The ‘431 patent is patentably distinct from the present application (and vice versa) and does not require a heater wire for novelty or inventive step.

Applicants submit that even if a person skilled in the art was to follow the teaching of Makin, that document teaches a spirally wound heater cable around the **outside** of the conduit. The only overlap between claims 1 and 2 of the present application and claim 1 of the ‘431 patent is the fact that they both relate broadly to conduits. The ‘431 patent relies on the structure of the conduit and reinforcement for novelty and inventive step, while the presently claimed invention relies on the structure of the heater element for novelty and inventive step. Therefore,

Applicants submit that the non statutory obviousness-type double patenting rejection raised by the Examiner is not proper.

In summary, the ‘431 patent and the present application are patentably distinct with no overlapping scope, apart from the fact that both relate to conduits, and the addition of Makin does not overcome this deficiency. The structure of the heating wire claimed in the present application is patentably distinct from the structure of conduit reinforcement for a breathable conduit claimed in claim 1 of the ‘431 patent even in view of Makin. Applicants request that the Examiner withdraw this rejection.

10 3. United States Application Serial No. 10/649,938 in View of Makin

The Examiner has suggested that claim 1 of United States Application Serial No. 10/649,938 discloses all of the features of claim 1 of the current application except for the heating element covered with an inner electrical insulating layer.

Again, the Examiner appears to have overlooked the significance of the inventive structure of the presently claimed invention which requires an inner insulating layer **and** at least a partial outer hydrophilic layer. Applicants submit that there is nothing in the co-pending ‘938 application which suggests the structure as claimed in the present application. Further, Applicants submit that the teaching of Makin would not lead a person skilled in the relevant art to the structure claimed in the present invention.

20 As discussed above, Makin teaches winding a spiral heater around the **outside** of the conduit. Both the co-pending ‘938 application and Makin are completely silent on the dual layered structure (i.e., insulating inner layer and hydrophilic outer layer) as claimed in the present

invention. A person applying the teaching of Makin to the teaching of the ‘938 application, would be taught to wind a heater wire around the outside of the conduit of the ‘938 application. Such a structure is claimed in the present invention, as claim 1 clearly requires the heating means to be located **within** the conduit, and further requires two layers over the heater wire.

5           The description of the present invention clearly describes a structure which attracts water within the conduit to itself, which is then re-vaporized. Applicants submit that the cited combination does not disclose a structure capable of this effect. Makin, like the co-pending ‘938 application, relies on preventing “Rain Out” in the conduit in the first place. Makin and the co-pending ‘938 application do not provide a structure for attracting any rain out (if it occurs) and  
10          then re-vaporizing it.

Further, Applicants submit that the ‘938 application is directed to a specific type of conduit which is constructed from a breathable material. The novelty and inventive step of the ‘938 application is derived from the synergy of a breathable walled conduit and a internal heater. In contrast, the present application as claimed is directed to a specific construction of a heater element. The present application does not rely on the structure of the conduit itself for novelty  
15          and inventive step, but rather is directed to the specific structure of heater wire. As such, the respective claims do not overlap other than the fact that they relate generally to conduits. The addition of Makin does not overcome this deficiency. Therefore, as the degree of overlap does not encompass the novelty or inventive step of the respective claims, Applicants submit that the  
20          rejection should be withdrawn.

Applicants submit that the present invention is patentably distinct from both cited documents (alone or in combination) and therefore Applicants request that the Examiner withdraw the rejection.

5       4.     United States Application Serial No. 10/622,755 in View of Makin

The Examiner has suggested that claim 1 of the United States Application Serial No. 10/622,755 discloses all the features of claim 1 of the present application except for the heating element covered with an inner electrical insulating layer.

The ‘755 application is directed to a novel conduit constructed of a breathable material.

10     Claim 1 of the ‘755 application does not claim a heater of any description and Applicants submit that it could not be obvious for a person skilled in the relevant art to modify the conduit of claim 1 of the ‘755 application according to Makin. The conduit of claim 1 of the ‘755 application is patentably distinct from the claim 1 of the present application and does not require a heater for novelty or inventive step. Again, Applicants submit that even if a person skilled in the art was to 15 follow the teaching of Makin, they would be led to wind a heater wire around the **outside** of the conduit.

The only overlapping scope between the respective claims arises because they both relate generally to conduits. However, Applicants submit that each respective claim is patentably distinct as they do not rely on the overlapping material for novelty or inventive step.

20     Applicants therefore request that the Examiner withdraw this rejection.

***Information Disclosure Statement***

Applicants acknowledge receipt of the partially initialed form relating to the Information Disclosure Statement filed on December 3, 2003. Applicants note, however, that Sheet 2 of 2 of the Information Disclosure Statement filed on December 3, 2003 was returned with the Office Action, but was not initialed. Applicants request confirmation of consideration of these references by return of the initialed form.

In view of the above Remarks, Applicants respectfully submit that the claims of the application are allowable over the rejections of the Examiner. Should the Examiner have any questions regarding this Amendment, the Examiner is invited to contact one of the undersigned attorneys at (312) 704-1890.

Respectfully submitted,

15 Dated: Dec. 29, 2006

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